



US 113 NORTH/SOUTH STUDY

Millsboro-South Area Working Group Meeting No. 12

March 15, 2006



Opening Remarks

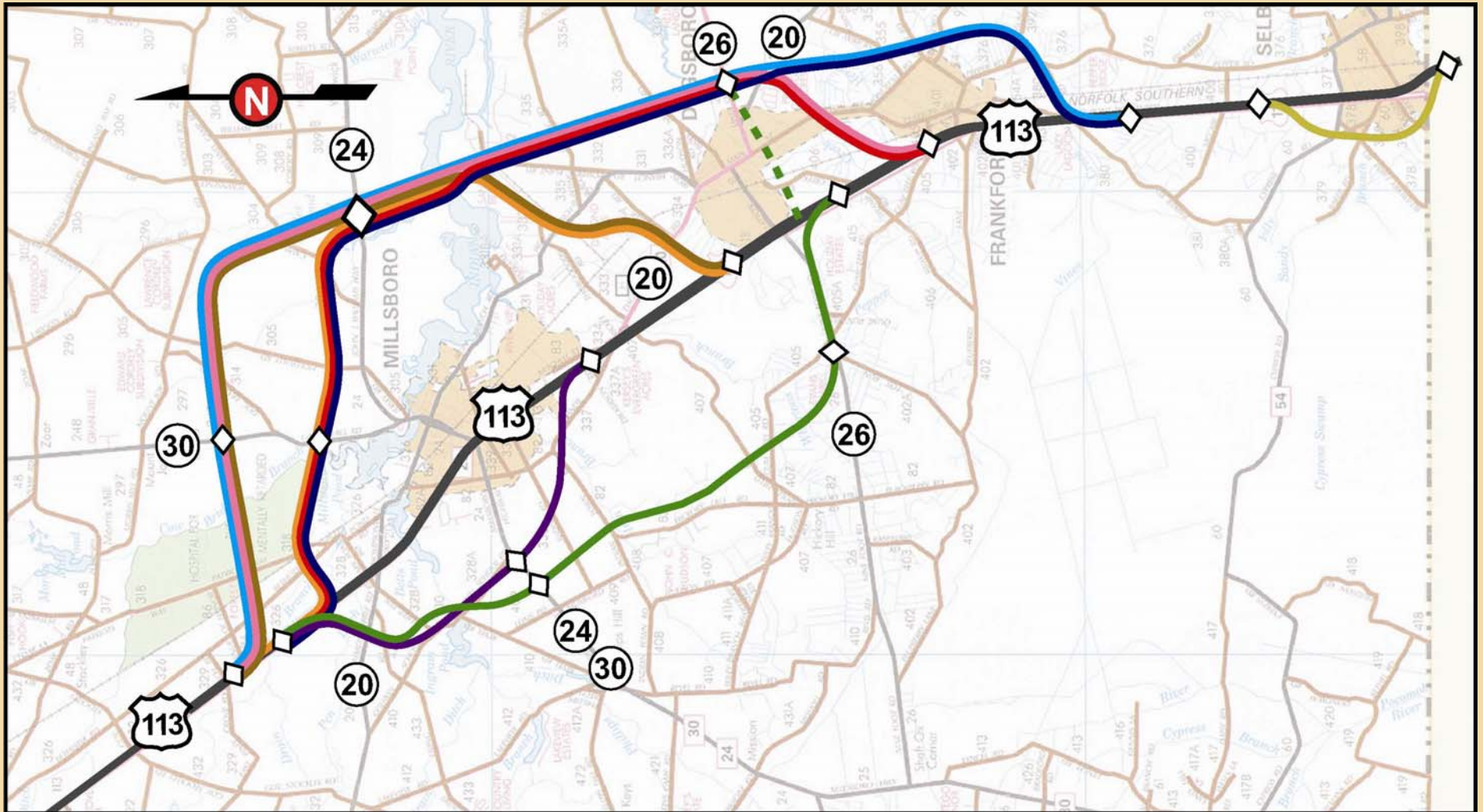
- **Project notebook materials**
- **Purpose of the meeting**
 - **Learn about real estate process**
 - **Provide traffic analysis update**
 - **Expand on status of Livable Delaware**
 - **Review alternative shifts and matrix updates**

“Real Estate 101”

Purchasing property

- **State vs private**
- **Advanced acquisition vs normal acquisition process**
- **Fair market value and just compensation**
- **Eminent domain**

Alternatives Retained for Detailed Study



Traffic Analysis

- What does traffic analysis help us determine?
- Two types of analysis
 - Planning level – what we have done
 - Traffic operations – what we are doing

Traffic Analysis

- **What does traffic analysis help us determine?**
 - **Operations of proposed project**
 - **Size of proposed project**
 - **Direct impacts of project**
 - **Indirect impacts of project**

Traffic Analysis

- **Operations of proposed project**
 - **How much traffic will it carry?**
 - **Does it meet project goals?**
 - **Will it operate acceptably?**

Traffic Analysis

■ Size of proposed project

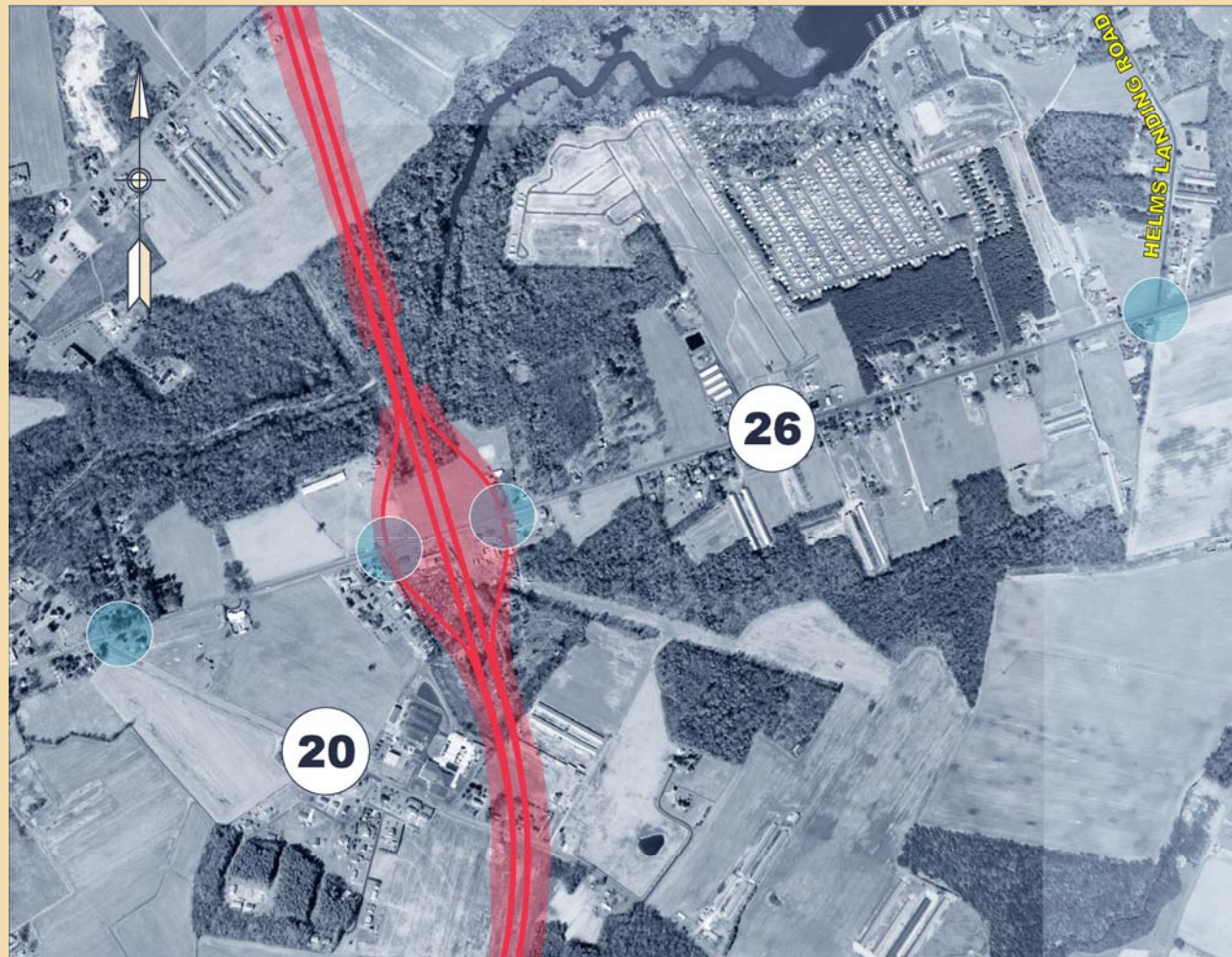
- How many lanes are required?**
- Do we need turning lanes?**
- Where do we need signals?**

Traffic Analysis

- **Direct impacts of proposed project**
 - **Traffic volumes**
 - US 113
 - Downtown Millsboro
 - **Travel time**
 - Emergency services
 - Schools
 - Transit, bicycles, and pedestrians
 - **Existing access**
 - Intersecting roads
 - Commercial
 - Residential

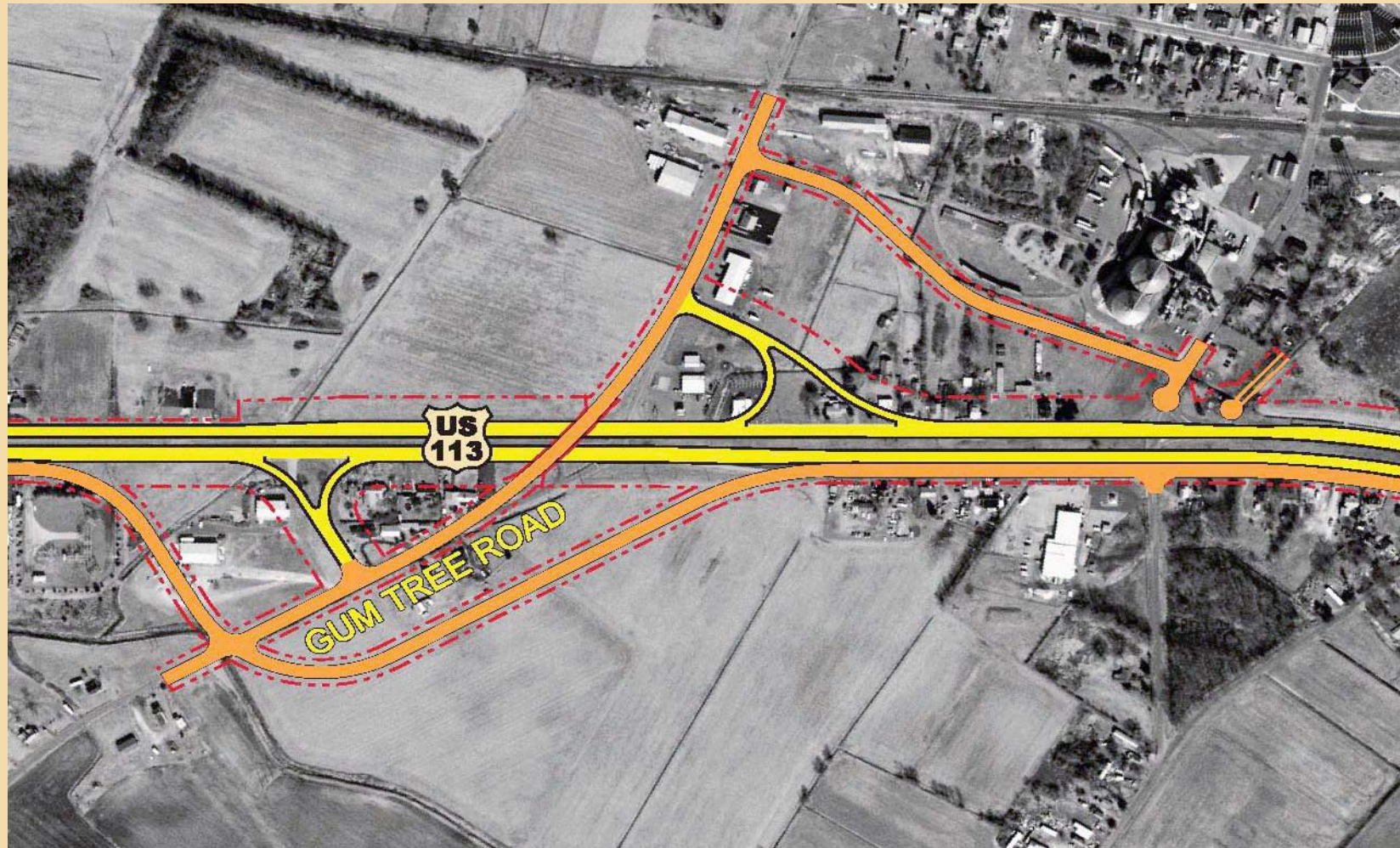
Traffic Analysis

Direct impacts: volumes at adjacent intersections



Traffic Analysis

Direct impacts: existing access

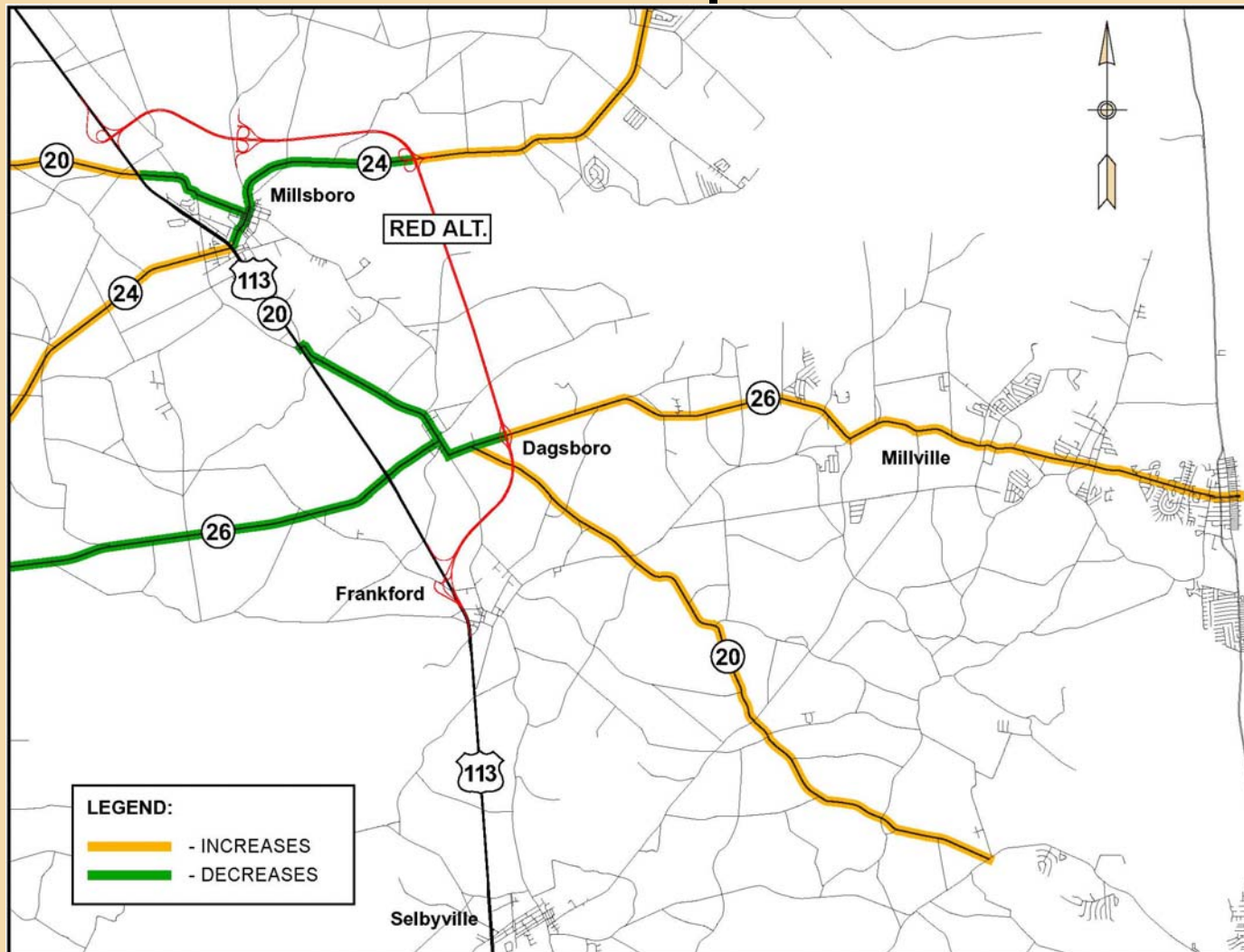


Traffic Analysis

- **Indirect impacts of proposed project**
 - **Surrounding roadways**
 - Where will traffic change (increase or decrease) more than 10 percent?
 - Evaluate need for additional improvements

Traffic Analysis

Indirect impacts



Traffic Analysis

Two kinds of analysis:

- 1. Planning level analysis
(big picture)**
- 2. Traffic operations analysis
(more detail)**

Traffic Analysis

Planning Level Analysis

- **Tells us how many through lanes are needed**
 - **Based on daily traffic volumes**
 - **Accounts for number of traffic signals**
- **Provides traffic data used for economic impact analysis**

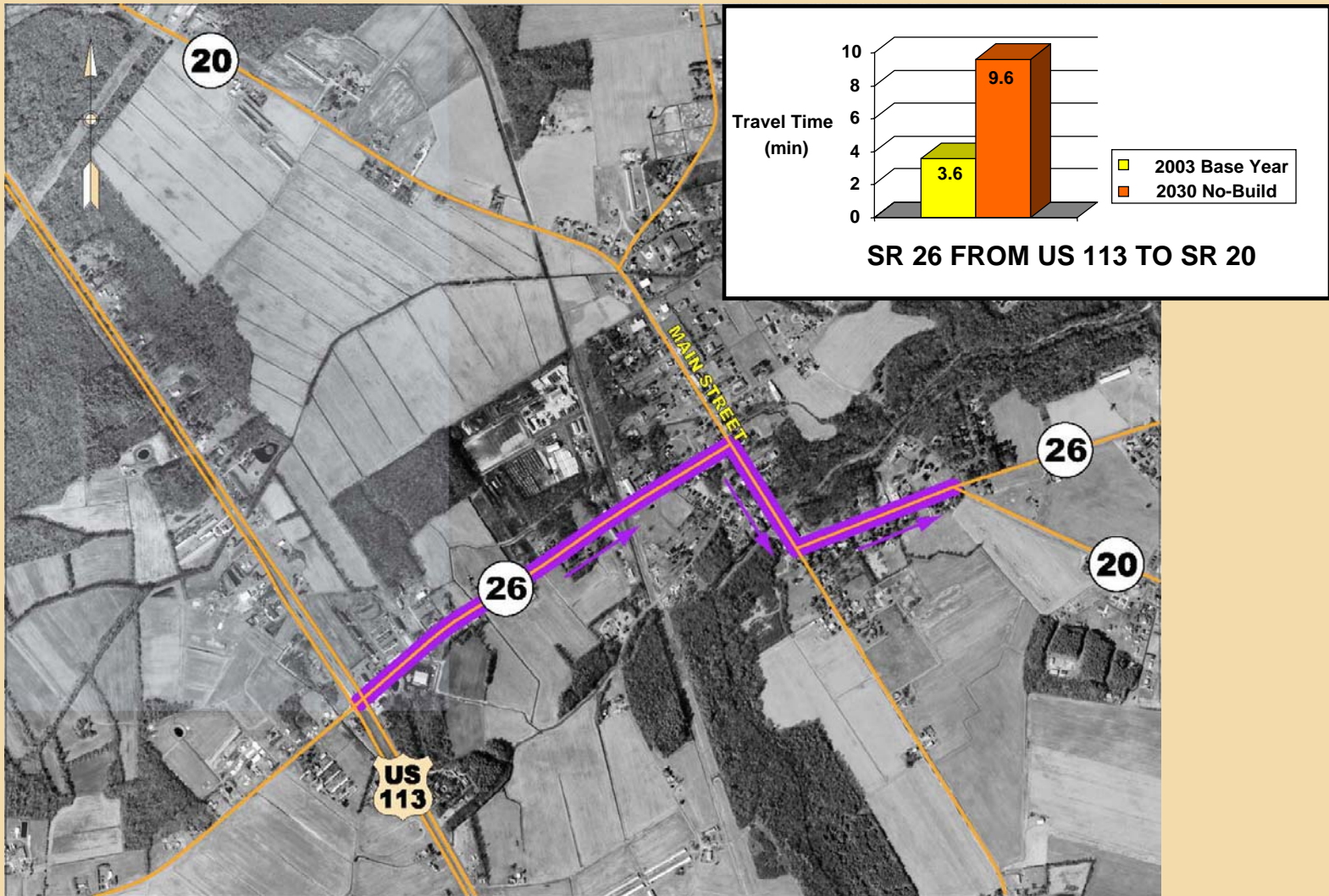
Traffic Analysis

Planning Level Analysis

- **Used to determine if any alternatives obviously won't meet purpose and need of project**

Traffic Analysis

Planning Level Analysis Example



Traffic Analysis

Traffic Operations Analysis

- **Tells how many through and turn lanes, intersection delay, and how far cars will back up**
 - **Focused on 30th highest hour in the year**
 - **Factored to account for peak 15-minute period**
 - **Accounts for turn lane length and width**
 - **Accounts for traffic signal timing**

Traffic Analysis

Traffic Operations Analysis

- **The general measure of how well an intersection operates – Level of Service (LOS)**
- **LOS is assigned a letter grade based on the AVERAGE delay**
- **LOS can be provided by intersection or by movement**

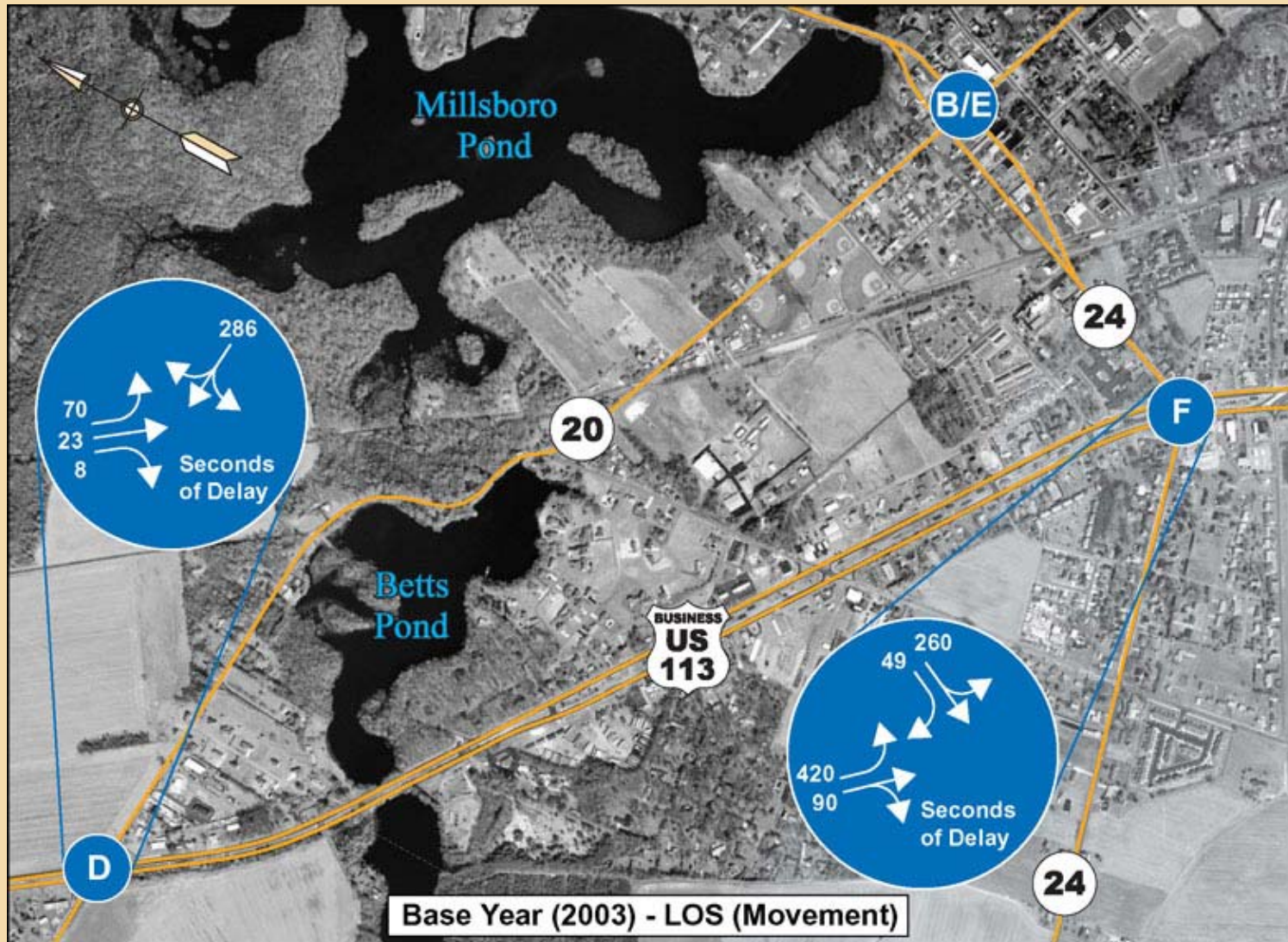
Traffic Analysis

Base Year (2003) Intersection LOS



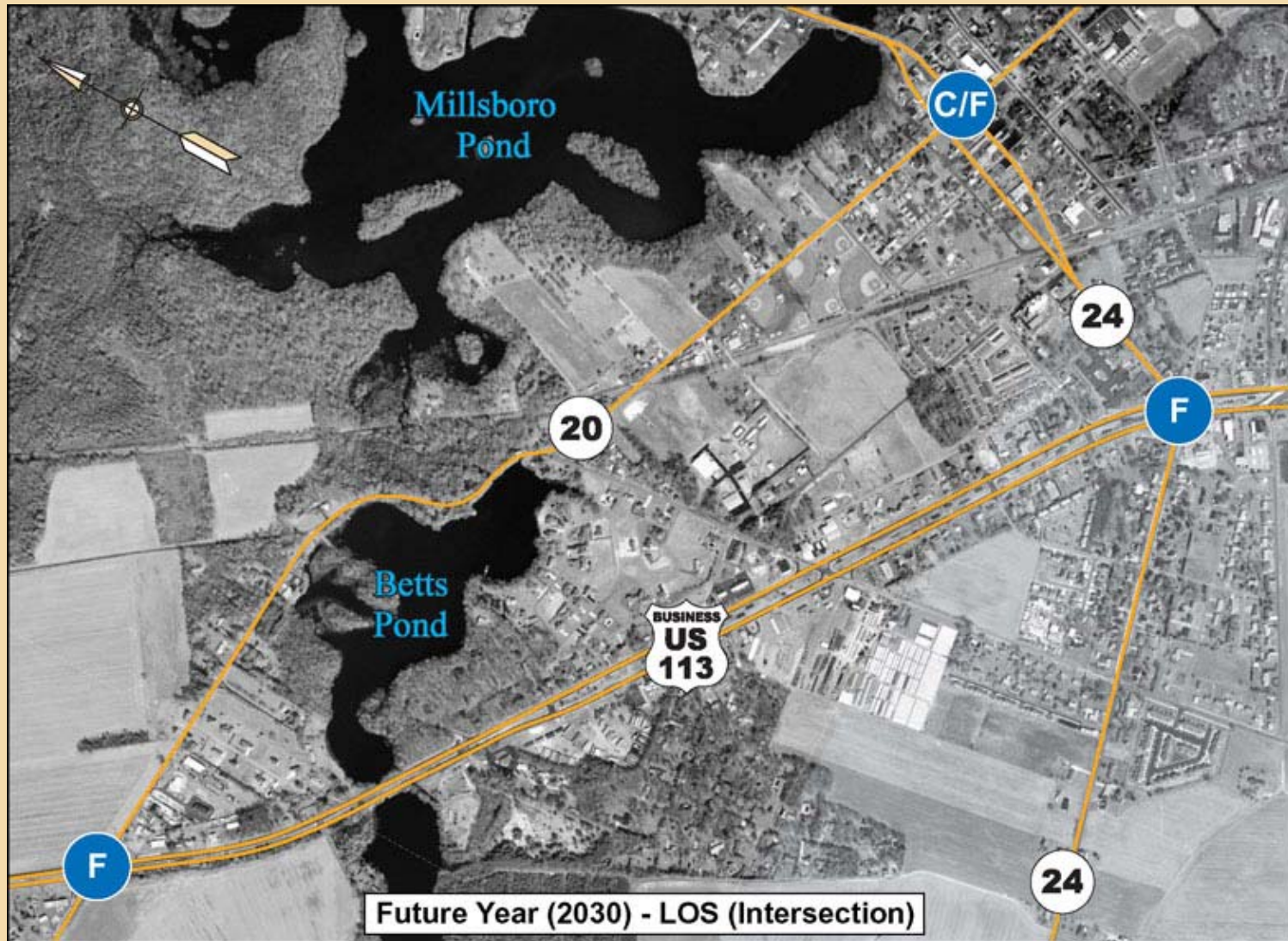
Traffic Analysis

Base Year (2003) Movement Delay



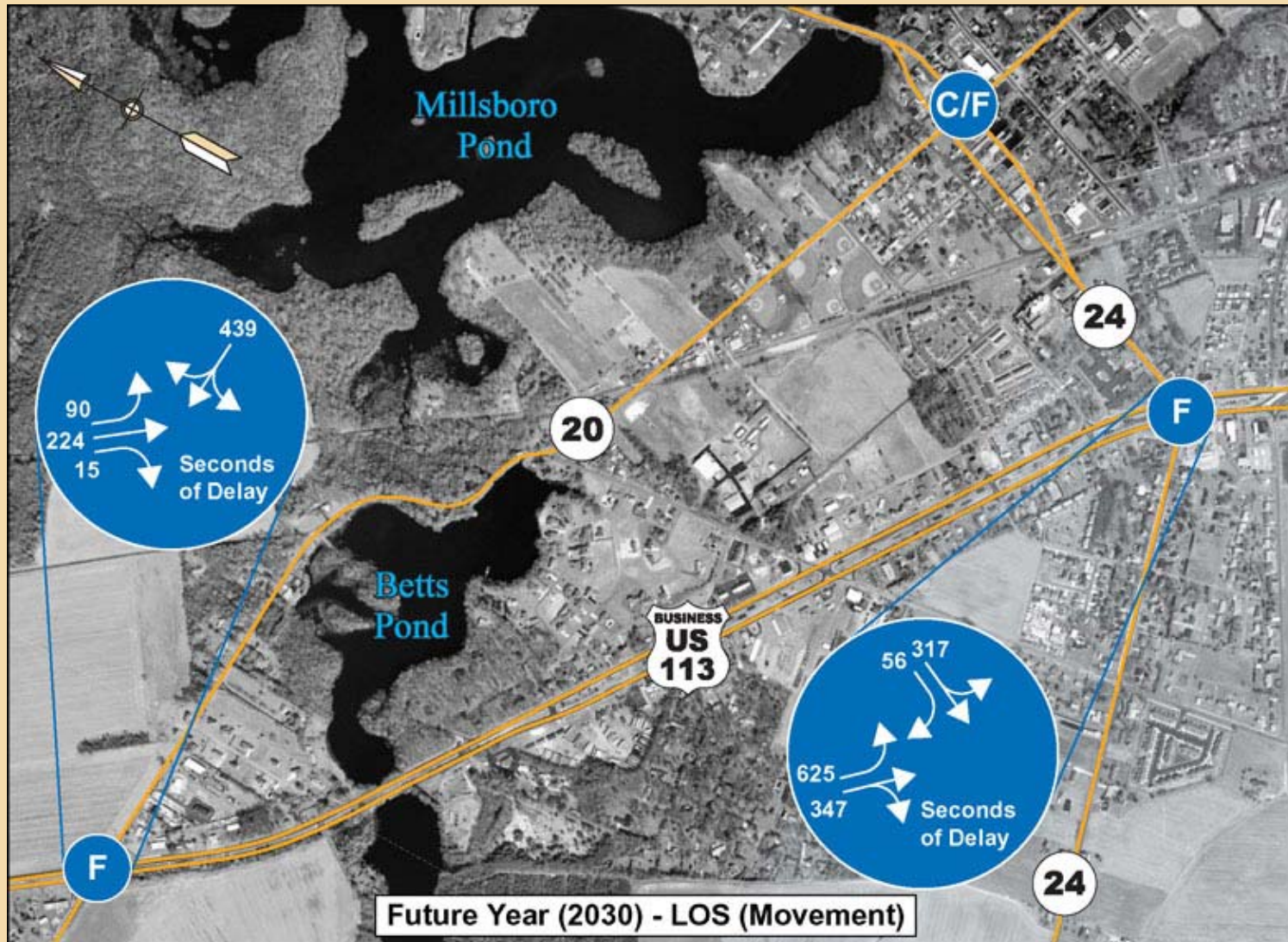
Traffic Analysis

Future Year (2030) No-Build Intersection LOS



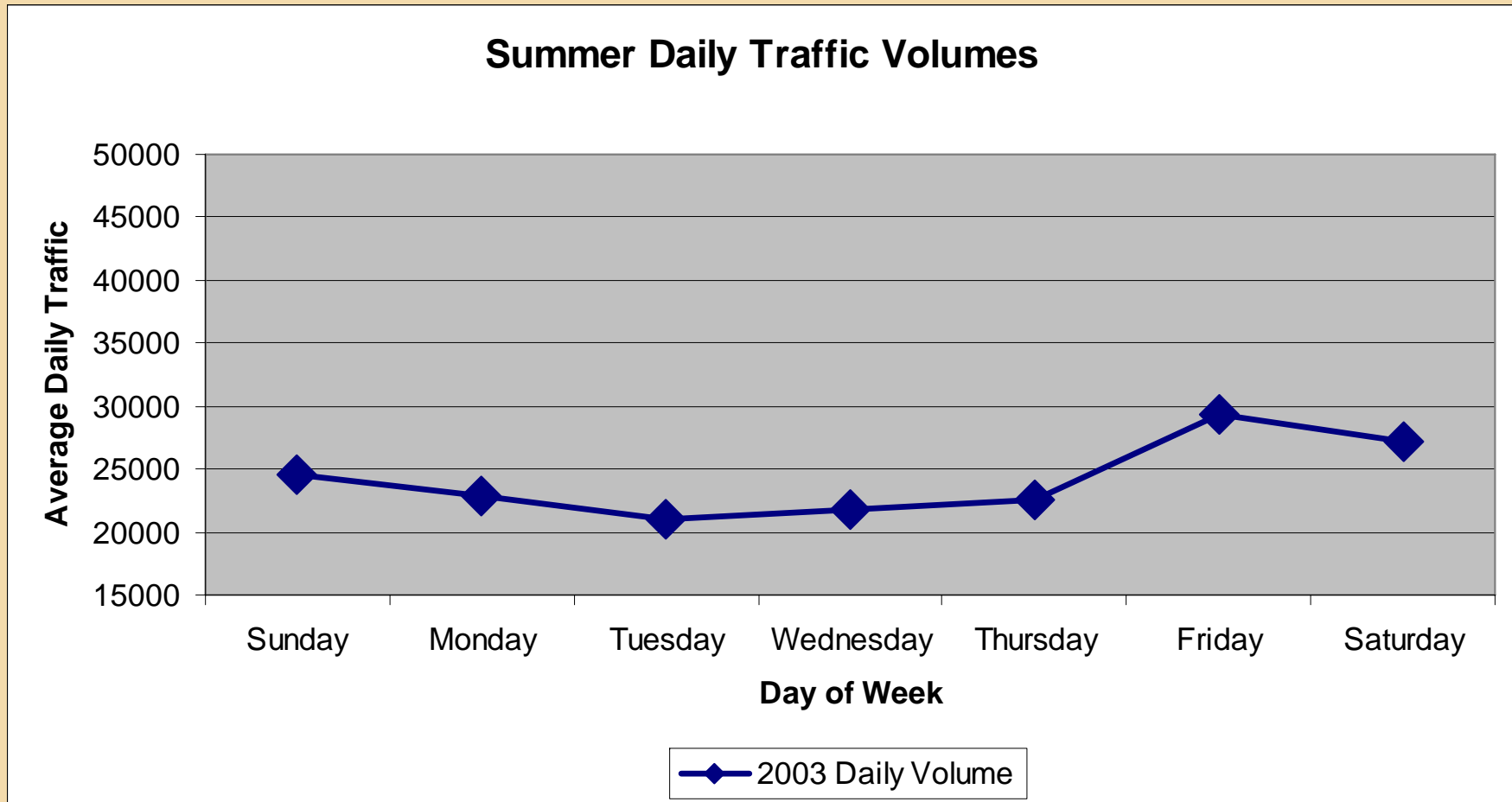
Traffic Analysis

Future Year (2030) No-Build Movement Delay



Traffic Analysis

US 113 North of Millsboro - Base Year (2003)

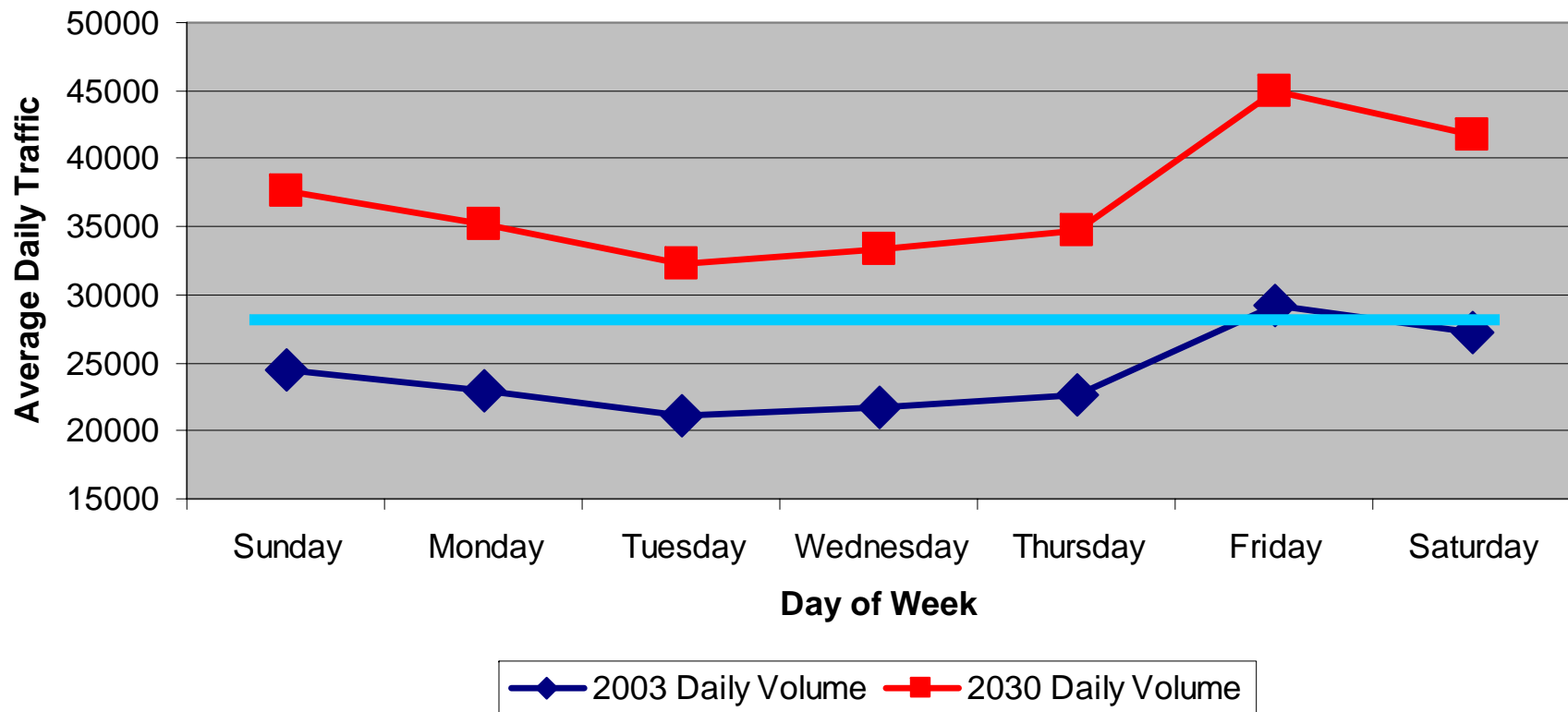


Daily Distribution of Traffic During Summer

Traffic Analysis

US 113 North of Millsboro - Future Year (2030) No-Build

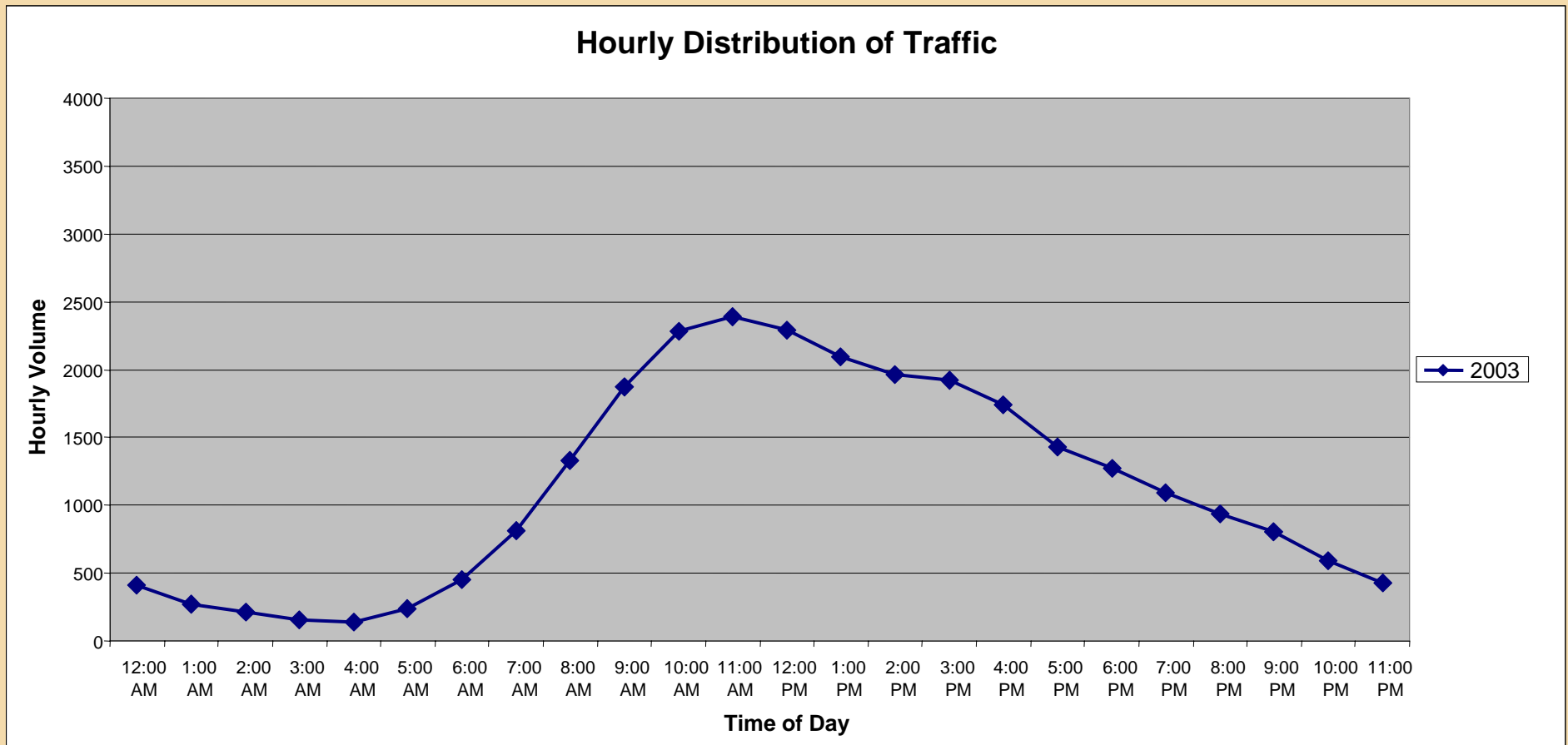
Summer Daily Traffic Volumes



Daily Distribution of Traffic During Summer

Traffic Analysis

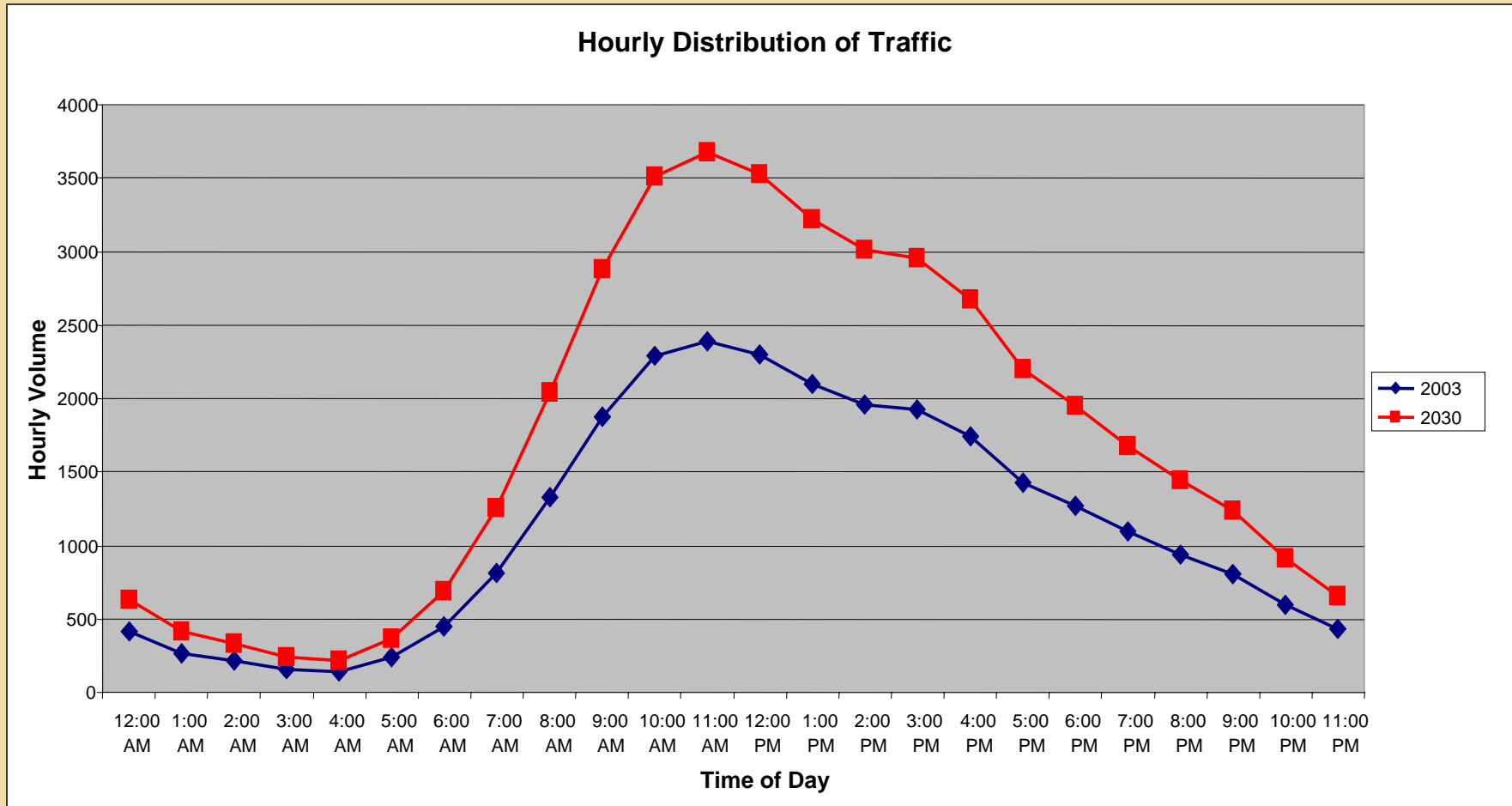
US 113 North of Millsboro - Base Year (2003)



Hourly Distribution of Traffic on a Summer Saturday

Traffic Analysis

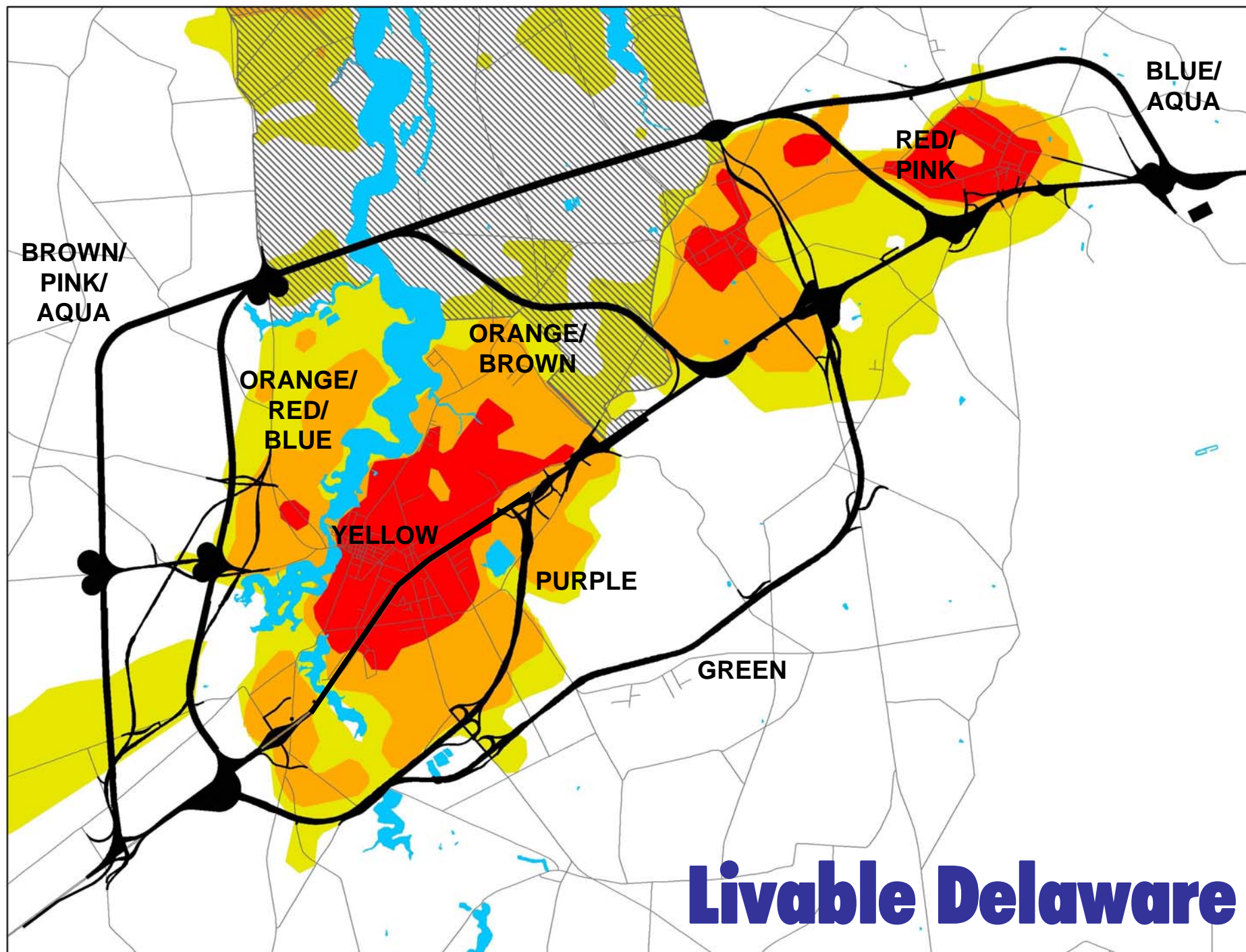
US 113 North of Millsboro - Future Year (2030) No-Build



Hourly Distribution of Traffic on a Summer Saturday

Livable Delaware

- **Coordination meeting held
March 8, 2006**
 - **Office of State Planning Coordination**
 - **Sussex County**
 - **Towns of Millsboro, Dagsboro,
Frankford, and Selbyville**



Livable Delaware

Consensus of the group

- **On-alignment**

- **Yellow: VERY POOR (divides the towns, does not serve anticipated growth, adversely impacts emergency services and evacuation)**

Livable Delaware

Consensus of the group

- **West bypasses**

- **Purple: VERY POOR (cuts off Millsboro's anticipated growth to the west)**
- **Green: POOR (similar to purple, but not as severe; includes interchange in level 4 area)**

Livable Delaware

■ **Consensus of the group** (continued)

- **East bypasses, north of the river**
 - Orange, Red, and Blue (southern option): **GOOD** (skirts anticipated growth boundary; SR 30 interchange serves anticipated growth)
 - Brown, Pink, and Aqua (northern option): **POOR** (too far north; SR 30 interchange may encourage growth outside preferred area)

Livable Delaware

■ **Consensus of the group** (continued)

- **East bypasses, south of the river**
 - Orange and Brown (south of Millsboro): **VERY POOR** (separates Millsboro and Dagsboro; doesn't get traffic to SR 26 and SR 20)
 - Red and Pink (south of Dagsboro): **VERY POOR** (separates Dagsboro and Frankford)
 - Blue and Aqua (south of Frankford): **GOOD** (most direct route; minimizes impact to anticipated growth areas)

Livable Delaware

- **Consensus of the group** (continued)
 - **East bypasses (north and south combined)**
 - Orange: POOR
 - Red: POOR
 - Blue: GOOD
 - Brown: VERY POOR
 - Pink: VERY POOR
 - Aqua: FAIR
 - **Connection from SR 26 interchange to SR 20 suggested**

Livable Delaware

Consensus of the group (continued)

- **Selbyville alternatives**

- **Potential commercial development northwest of US 113/SR 54 intersection will affect alternative selection**
- **Discussions to be held with developer**

Matrix

- **Wetlands**
- **Cultural resources**
- **Section 4(f)**
- **Section 6(f)**
- **Farmland**
- **Forestland**
- **Property impacts**
- **Traffic**
- **Economic impacts**
- **Cost**
- **Livable Delaware**

Wetlands

- **Field work completed last week**
- **U.S. Army Corps of Engineers confirmed that GIS information is valid for study**

Cultural Resources

- **More than 450 properties included in preliminary evaluation**
- **Field view conducted March 9, 2006**
 - **Visited 21 properties and three districts with agencies to determine potential eligibility**
 - **Based on field view, the project team currently considers 25 properties and five districts as potentially eligible**
- **Further historic property research needed**

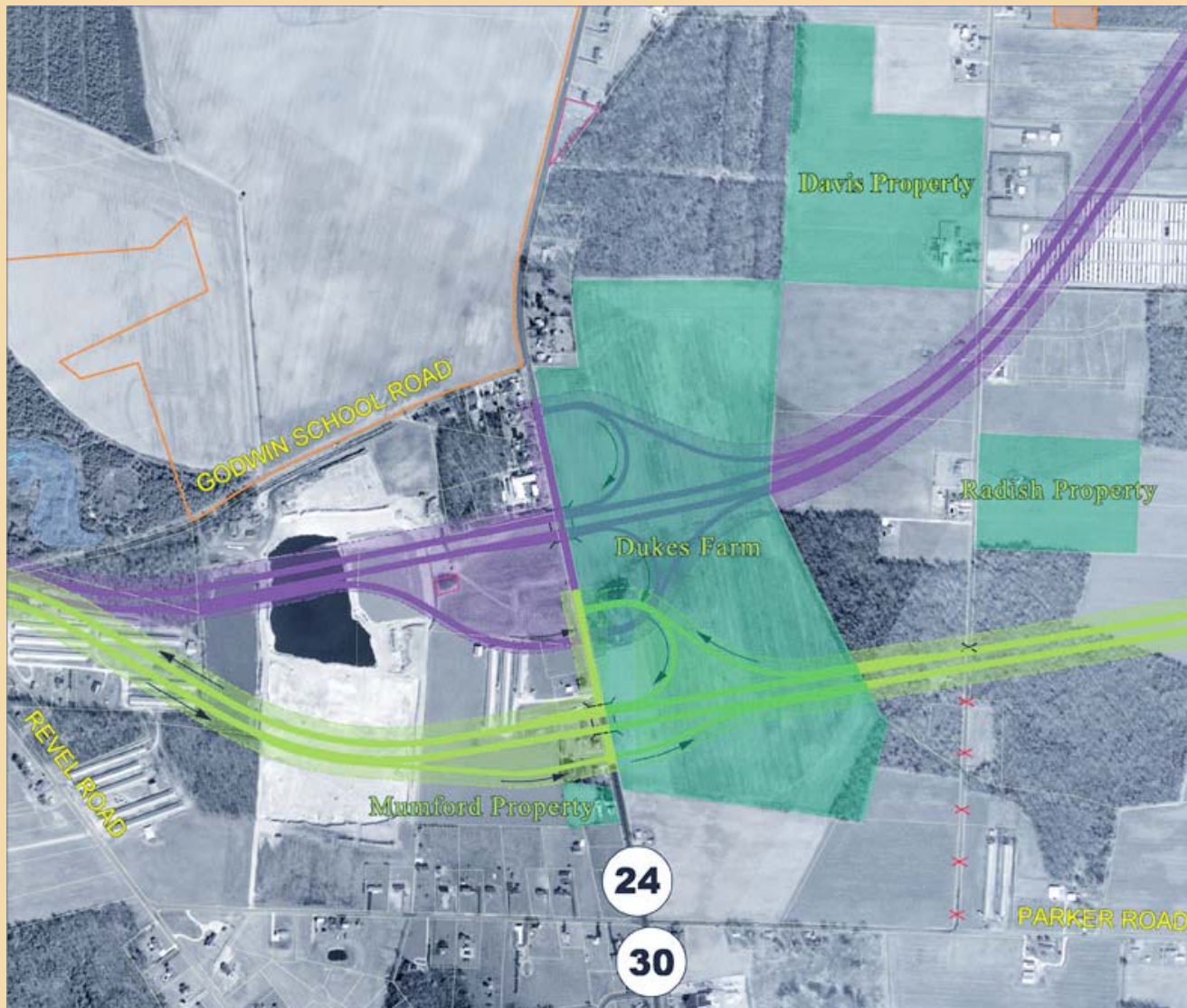
Cultural Resources

- **Potential impacts on historical properties associated with several alternatives.**
- **Detailed archeological study to be completed for preferred alternative**

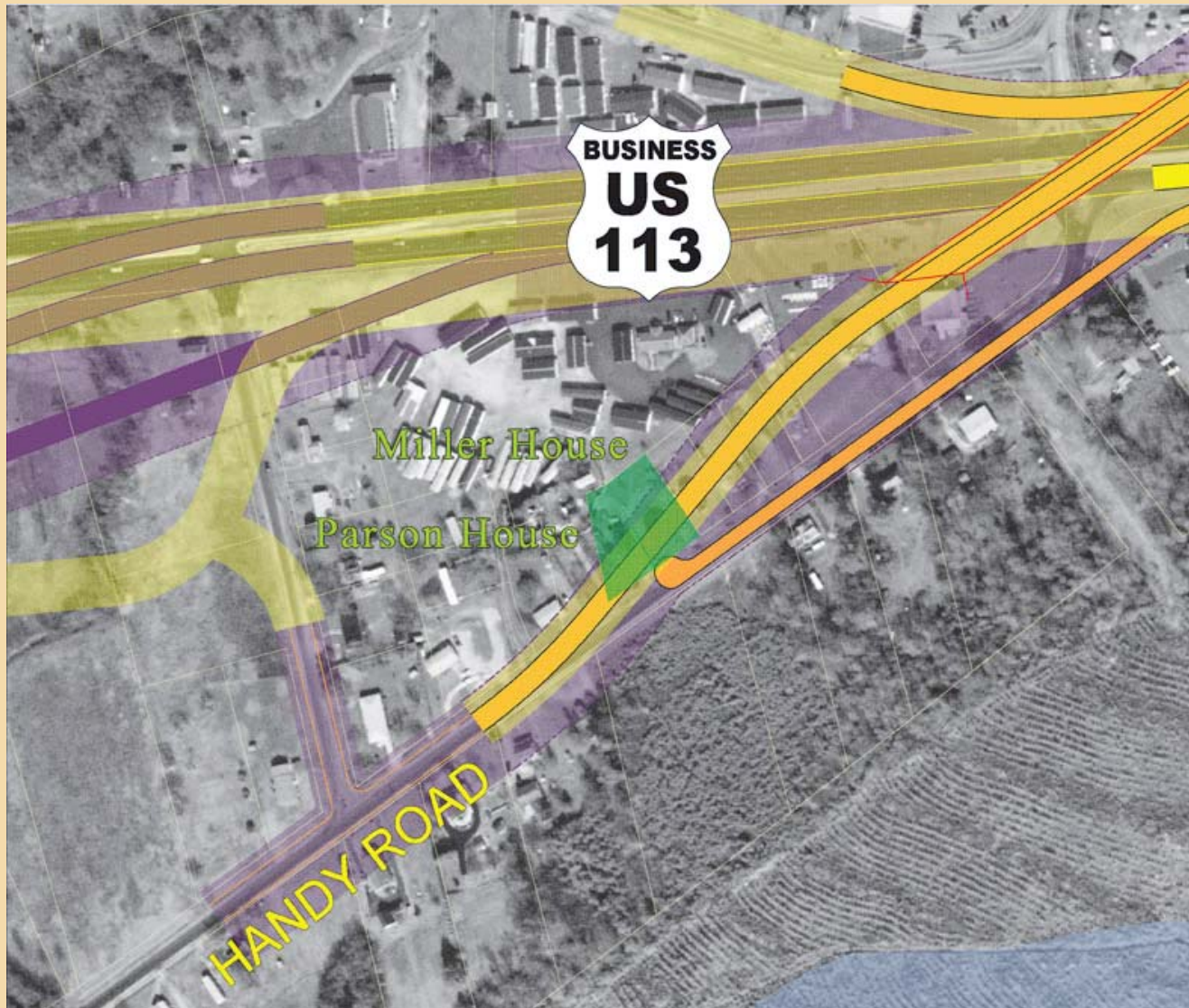
Cultural Resources

- **Potential direct impacts to the following properties:**
 - **Dukes Farm – Green and Purple**
 - **Parson House – Yellow and Purple**
 - **Miller House – Yellow and Purple**

Cultural Resources



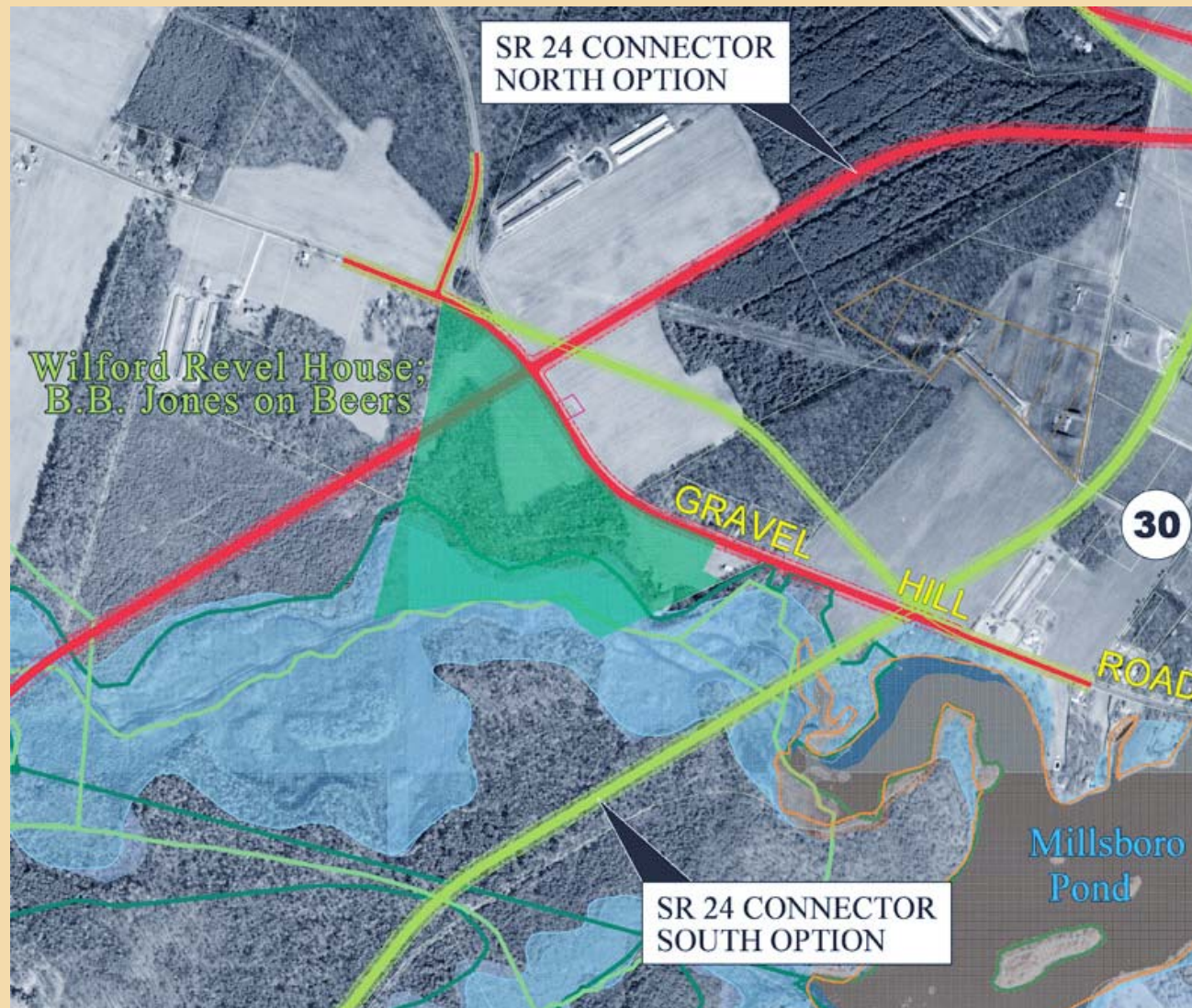
Cultural Resources



Cultural Resources

- **Potential indirect impacts to the following properties:**
 - **Wilford Revel House – Green and Purple (SR 24 connector)**
 - **Gray Farm – Yellow, Green and Purple**
 - **Antioch AME Church – Red and Pink**
 - **Mountaire Feed Mill – Yellow**
 - **Long-Mumford House – All alts.**
 - **Warren-Mumford Property – All alts.**

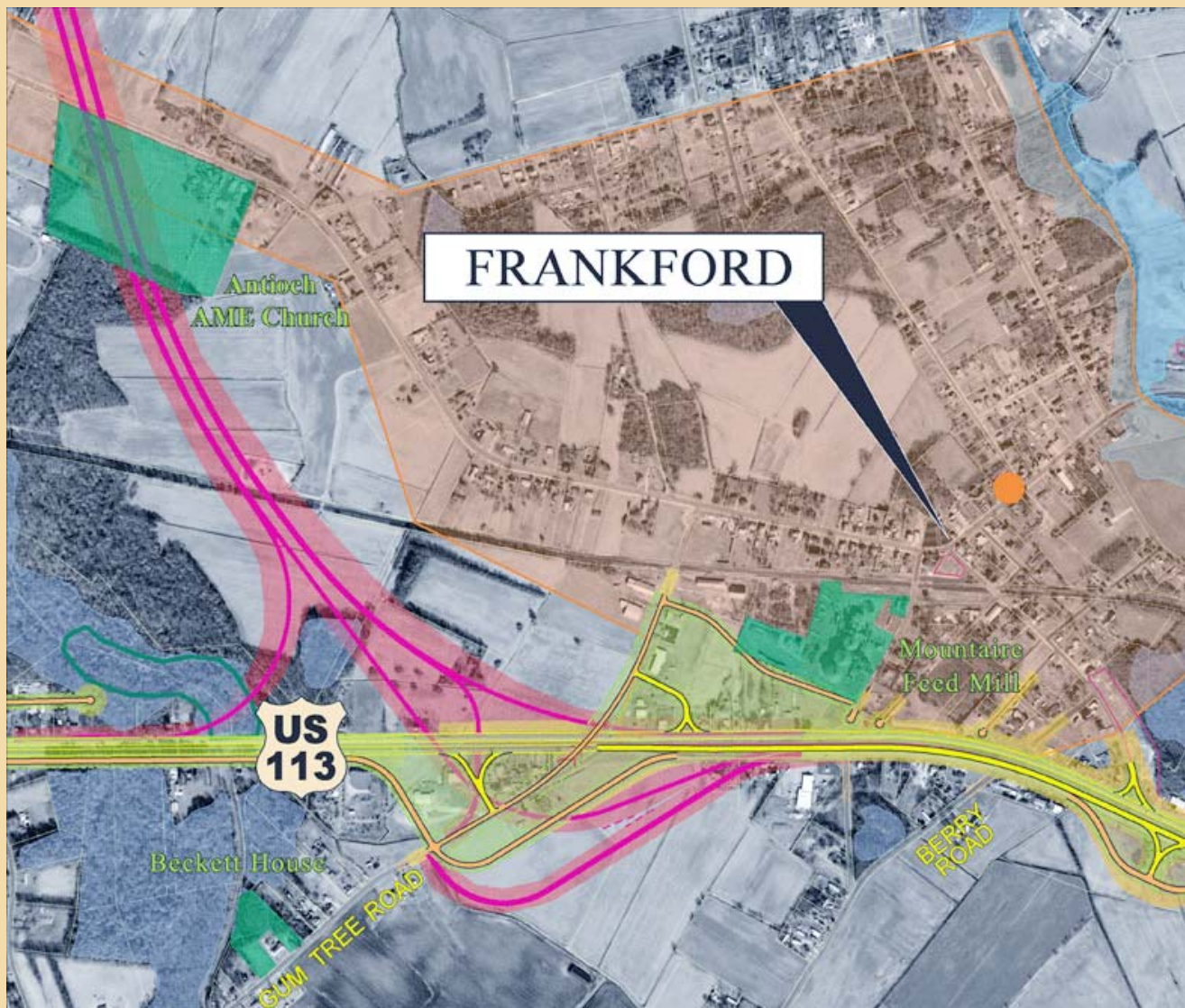
Cultural Resources



Cultural Resources



Cultural Resources



Alternative Shifts

- **On-Alignment Alternatives**
- **East Bypass Alternatives**

Next Steps

- **Additional cultural resource work**
- **Economic impact analysis**
- **Additional, updated traffic analysis**
- **Continuing alignment adjustments to minimize / balance impacts**
- **Cost estimates**
- **Livable Delaware recommendations in Selbyville**

Upcoming Working Group Activities

January Through Winter 2006:

Assist in refining alternatives

Early 2007:

Recommend preferred alternative

Next Working Group Meeting

May, date to be determined

5:30 PM

Millsboro Fire Hall